

## **Historic, Archive Document**

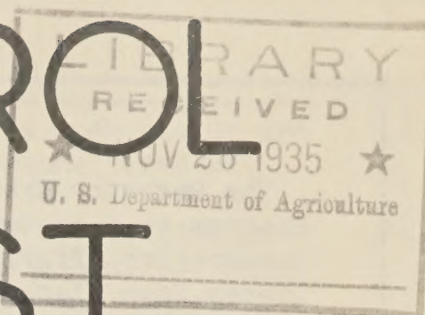
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# HELP CONTROL STEM RUST



## FACTS about BARBERRY ERADICATION

*What is it?*

*What will it accomplish?*

*Why do it now?*

*How can individuals help?*

UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

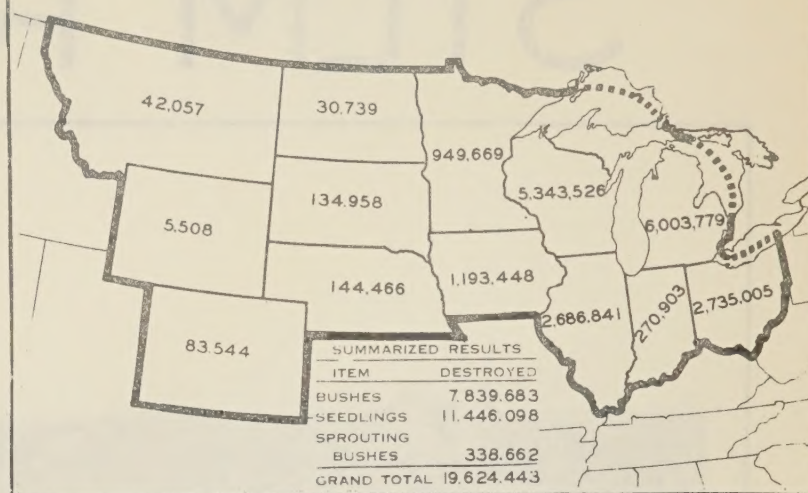


# WHAT IT IS

The Barberry Eradication Program is a systematic cooperative effort to reduce losses from Black Stem Rust in thirteen of the North-Central States.

Historical records show that stem rust has been one of the greatest hazards in the production of small grains.

NUMBERS OF BARBERRY BUSHES AND SEEDLINGS DESTROYED 1918-1934



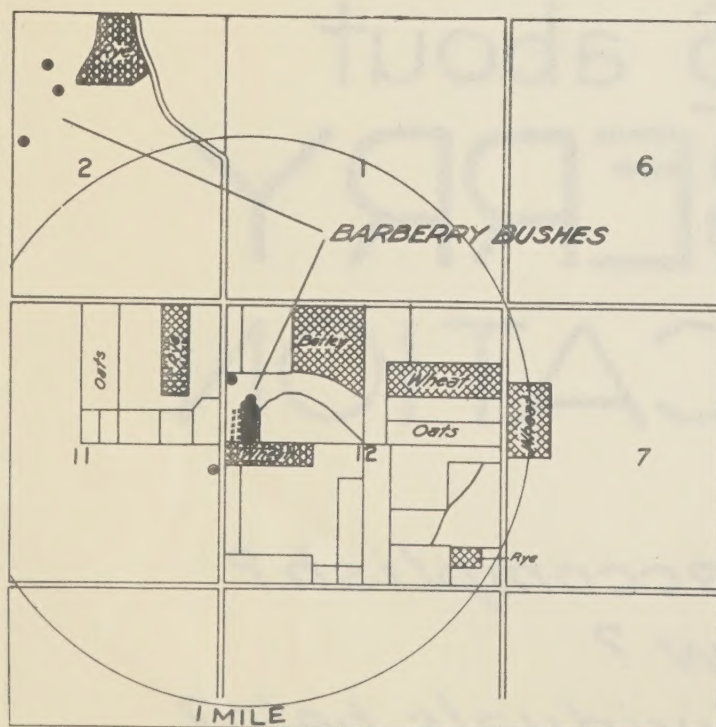
There are two possible sources of stem rust in Nebraska, (1) spores which come directly from the barberries within the State and (2) spores which may be blown in from Texas or surrounding States.

Barberries have been found rusted in 70 Nebraska counties. The average date of infection is near mid-April, and nearby grasses are often found infected by the third week in May. Rust from the South does not normally become prevalent in this State until about the second week in June. Thus the relative importance of the two sources of stem rust may vary from year to year, depending upon weather conditions and the stage of development of the crops when infection first becomes general.

Eradication of the remaining barberry bushes in Nebraska will eliminate the local source of stem rust inoculum and greatly reduce the possibility of extensive damage from rust in normal crop years.

## Valley County -

9 1/2 miles to Ord, Neb. →



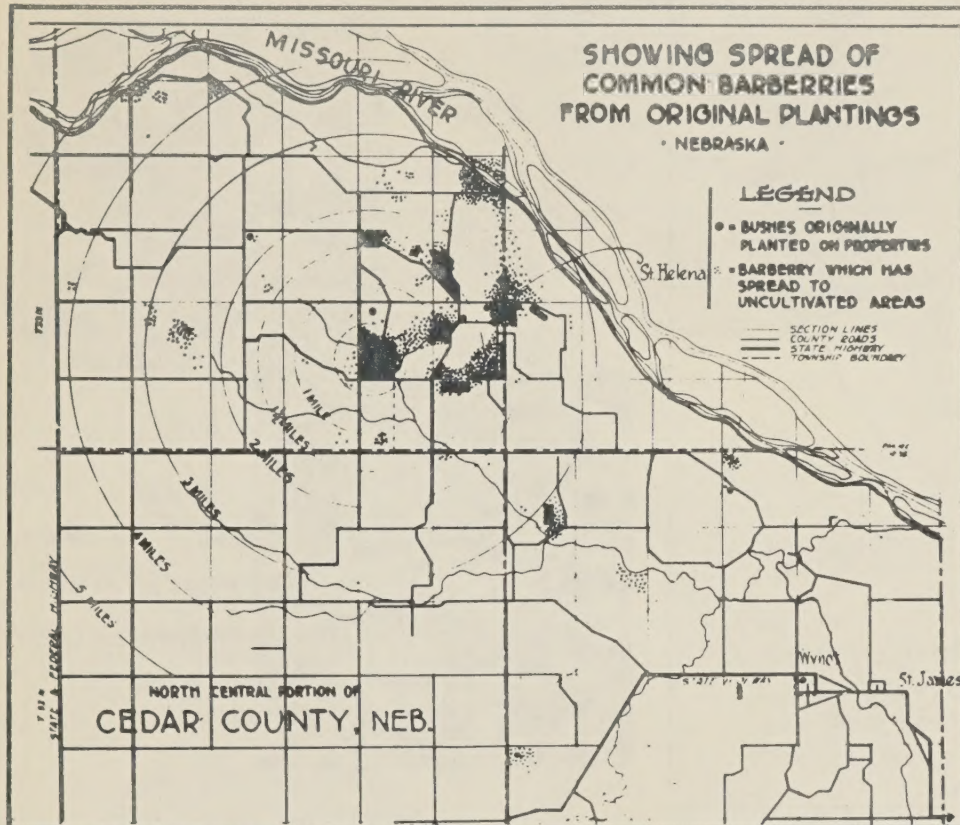
*Rust infection heaviest near barberry bushes*



# DO IT NOW

To eradicate the first small patch of weeds that appears is much easier and cheaper than to attempt control after an entire field has become infested.

The same principle applies in connection with the barberry eradication program. Since 1918, 144,000 rust-spreading barberry bushes have been destroyed in Nebraska. The barberry population in this State is now at the lowest in many years.

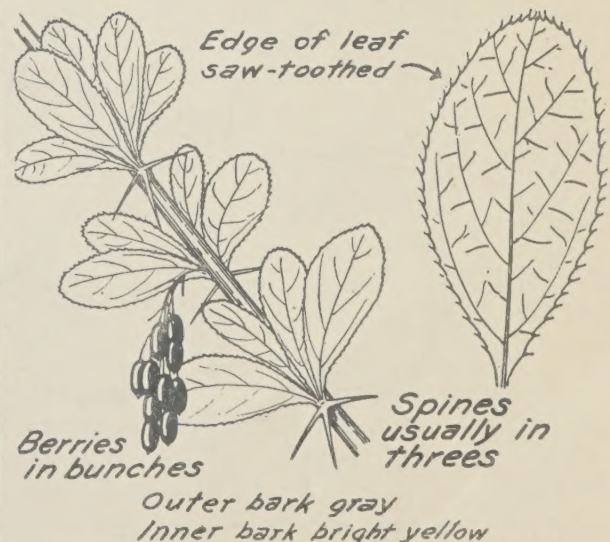


A few bushes originally planted in Cedar County for ornamental purposes produced seed that was scattered over a large area, as indicated in the map at left. Barberry seed may remain dormant for several years before germinating. Therefore, to eliminate these bushes completely from Cedar County will require frequent reinspections of the infested area and the continued cooperation of property owners in eradicating new bushes that appear.

*An Individual reporting harmful barberry lends valuable assistance in the drive to control destructive stem rust outbreaks.*

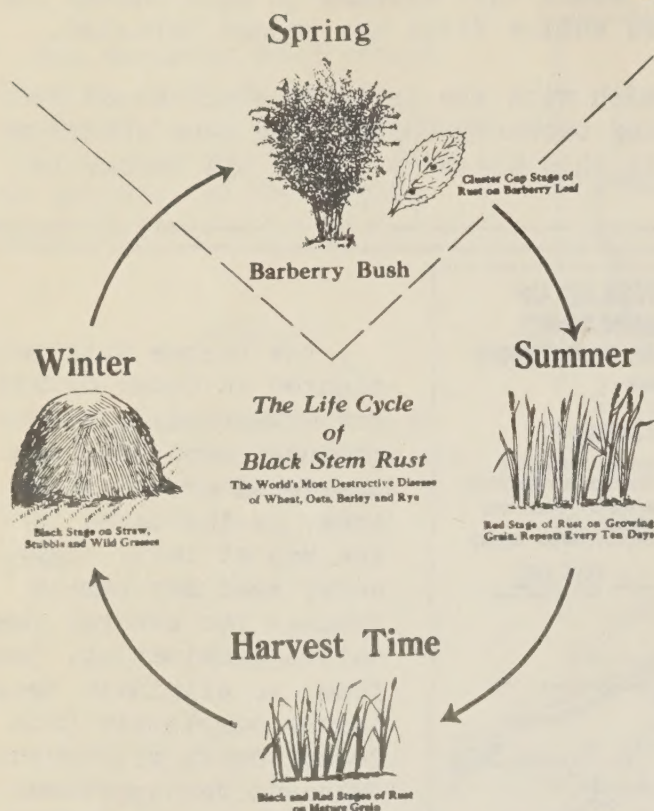
Your report should be sent to the  
**BARBERRY ERADICATION OFFICE**  
 State Agricultural College, Lincoln

*Learn to know the Rust-Spreading Barberry*





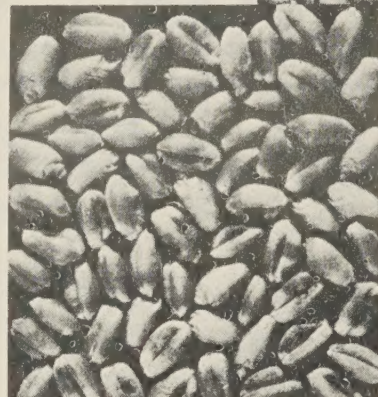
# WHAT IT WILL ACCOMPLISH



Removing barberry bushes breaks the rust cycle, thus preventing the disease from transferring in the spring from the old straw and stubble to the new grain crops.

Barberry eradication is helping to lower the cost of producing grain by increasing yields per acre and stabilizing the quality of the harvested product. Rust damage always takes place after the major cost of production has been incurred.

*This is what black stem rust does to wheat.*



*Plump, healthy wheat kernels from non-rusted plants.*

## NEW STRAINS OF STEM RUST DEVELOP ON BARBERRY

MORE THAN A HUNDRED PARASITIC STRAINS OF WHEAT STEM RUST ALONE ARE KNOWN  
EACH STRAIN CAN ATTACK SOME WHEAT VARIETIES BUT NOT OTHERS



There are many varieties and strains of the stem rust fungus. Two of these may cross on the leaf of the barberry bush, producing one or more entirely new strains which may attack varieties of grain that heretofore have proven resistant to the disease. Thus the barberry is not only a source of early spring rust infection but may be responsible for the appearance of new and more destructive strains of the disease. Stem rust attacks wheat, oats, barley, and rye.